

The 2014 Drought

Implications for Food Security

George Manalo-LeClair

October 3, 2014



California Food Policy Advocates

California Food Policy Advocates (CFPA) is a statewide public policy and advocacy organization dedicated to improving the health and well being of low-income Californians by increasing their access to nutritious, affordable food.

For more information about this report, please contact George Manalo-LeClair at george@cfpa.net or 510.433.1122 ext. 103.

For more information about CFPA, please visit www.cfpa.net.

California is experiencing its worst drought in decades. How does this affect food insecurity in our state? This report examines possible impacts, discusses what food security-related actions have been taken to date, and recommends additional steps to ensure food security.



Background

In January 2014, Governor Brown declared a state of emergency as a result of an ongoing, three-year drought in California.¹ According to researchers at the University of California, Davis (UC Davis), the current drought “is responsible for the greatest reduction in water availability for California agriculture ever seen.”² In response, the Governor has established statewide water restrictions, asked Californians to reduce water use by 20 percent, and offered up to \$700 million in emergency drought assistance. While helpful, these actions do not delay the immediate negative impacts of the drought. Significant losses in economic activity are predicted for 2014:

- ➔ **Idle Land:** The impact on California’s agriculture industry is expected to be severe. Estimates are that a half million acres of California farmland will be left fallow this year, resulting in less food production.
- ➔ **Job Losses:** UC Davis estimates a loss of 17,100 agriculture related jobs.
- ➔ **Total Cost:** The statewide cost of the drought to California is estimated to be \$2.2 billion in 2014.

The Drought, Job Loss, and Food Security

The statewide unemployment picture is brightening. According to the UCLA Anderson Forecast, by the end of 2014, California's unemployment rate is likely to fall to 7.8 percent from 8 percent. The jobless rate is expected to plunge to 6 percent by the end of 2016.^{3,4} Given this perspective, the loss of 17,100 agriculture related jobs in a state of 38 million people, may not appear significant. This job loss, however, is not spread widely throughout the state. Rather, the losses will be concentrated in specific communities.

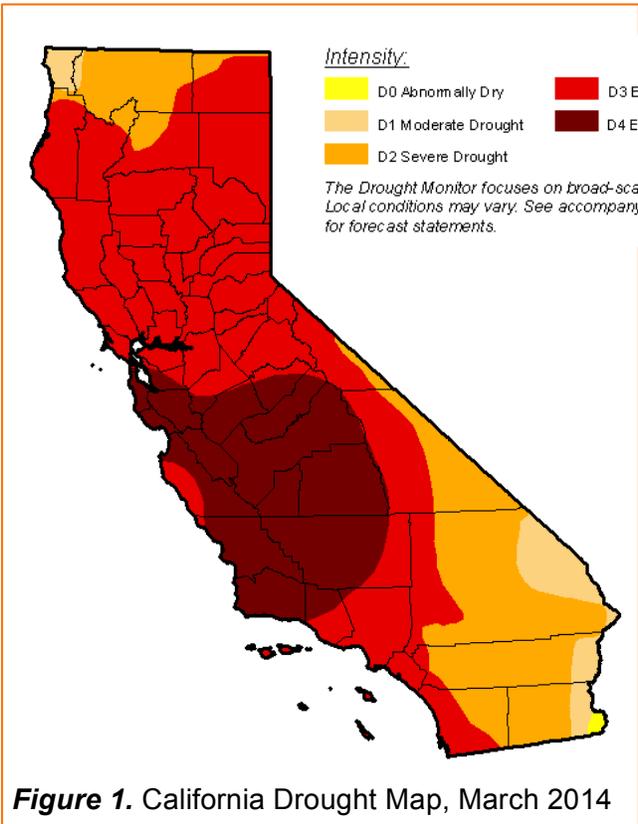
UC Davis estimates that almost all of the job loss impacts will be felt in the three Central Valley River Basins:

1. The Sacramento River Valley
2. The San Joaquin River Valley
3. The Tulare Lake Basin

These three areas have more in common than just their significant agricultural production: they also have historically persistent problems with poverty and food insecurity.



It is this concentration of job loss in already struggling communities that is cause for concern. California Food Policy Advocates (CFPA) and the University of California, Los Angeles (UCLA) have been tracking food insecurity rates since 2002. The Central Valley counties expected to bear the brunt of job losses are also counties that have had a significant percentage of low-income adults experiencing food insecurity over the last decade.



The following map images (Figure 1, 2, and 3) depict the concentration of these challenges in specific communities.

California Drought Map March 2014

Figure 1 depicts drought-impacted areas in March of 2014.⁵ The darkest regions are areas of exceptional drought. Current maps show exceptional drought across nearly the entire state, but this depiction is helpful in that it shows the areas that have been impacted by exceptional drought for a longer period of time (since at least March 2014).

California Poverty Map 2008-2012

Figure 2, from California Budget Project, depicts poverty rates by county.⁶ The darker areas indicate counties with high percentages of people with incomes below the federal poverty line. Take note that the darkest areas in Figure 2 include the same cluster of counties experiencing exceptional drought, as shown in Figure 1.

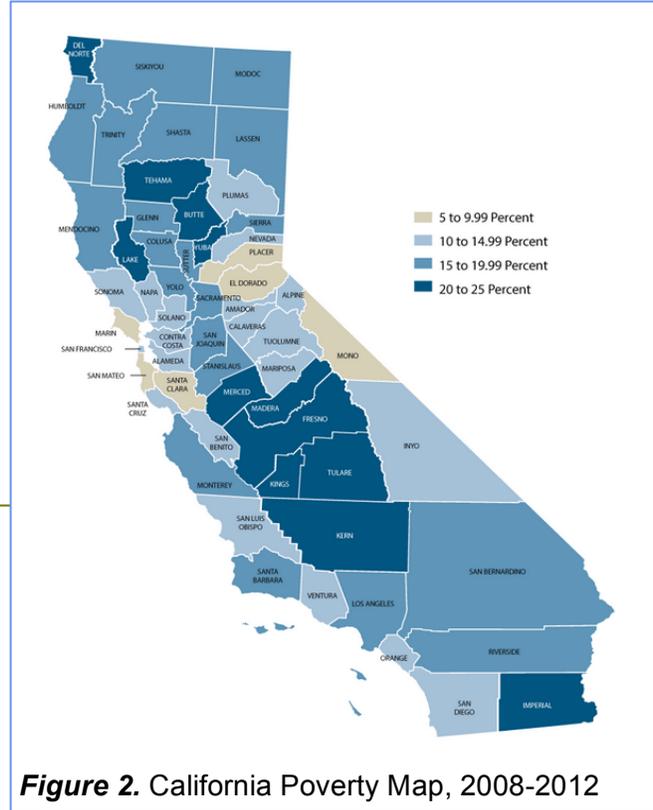


Figure 2. California Poverty Map, 2008-2012

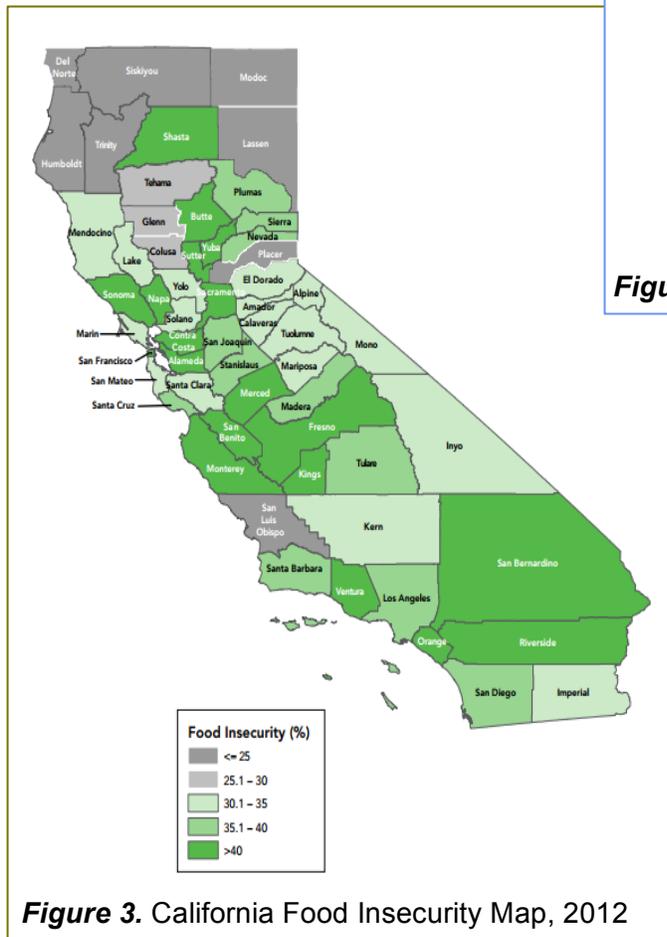


Figure 3. California Food Insecurity Map, 2012

California Food Insecurity Map 2012

Figure 3 is from the most recent food security brief produced by UCLA and CFPA in 2012.⁷ It depicts food security rates by county. The darkest green areas are those communities with the highest percentage of low-income adults experiencing food insecurity. Again, take note that the cluster of darkest areas include the same Central Valley counties as those experiencing high rates of poverty (Figure 2) and exceptional drought conditions (Figure 1).

Geographic Distribution of Drought Related Job Loss

Now add to this picture of poverty and food insecurity the geographic distribution of drought related job loss. In analyzing the impact of the drought, UC Davis used planning regions organized around watersheds (Table 1).

Table 1. UC Davis Drought Planning Regions

Region	Counties
Sacramento River	<i>Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Glenn, Placer, Sacramento, Shasta, Solano, Tehama, Sutter, Yolo, Yuba</i>
San Joaquin River	<i>Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tuolumne</i>
Tulare Lake Basin	<i>Fresno, Kings, Tulare, Kern</i>
Central Coast	<i>Monterrey, Santa Clara, San Benito, San Luis Obispo</i>
South Coast	<i>Ventura, Los Angeles, San Diego, Santa Barbara</i>
Inland Southern	<i>Imperial, Riverside</i>

About 40 percent of the job loss related to the drought is expected to occur in the Tulare Lake Basin, which includes the counties of Fresno, Kings, Tulare, and Kern. Already, over 35 percent of low-income adults experience food insecurity in these counties, and 20 to 25 percent of people live in poverty.

Will the drought increase food insecurity in California?

Existing analyses do not suggest that food insecurity would significantly increase statewide. However, the conditions that exist in several specific communities, especially in the Tulare Lake Basin, suggest that new drought related job losses might exacerbate long-standing problems with food security.

The Drought, Food Prices, and Food Security

Droughts can drive up food prices. Higher food prices would affect all consumers, but could disproportionately impact low-income consumers who have fewer, more limited resources for food. While food prices may rise in the near future, experts believe such a rise is unrelated to the drought in California.

The United States Department of Agriculture (USDA) has been monitoring the drought in California and has stated that it is “too soon” to know if the drought will increase the cost or decrease the availability of California produce.⁸ USDA does expect U.S. fruit and vegetable prices to increase, but for issues related to citrus freezes and the impacts of disease. According to USDA, “overall, the California drought has not yet had a discernible impact on national prices for fruit or vegetables.”

UC Davis researchers hold a similar view: “Consumer food prices will be largely unaffected. Higher prices at the grocery store of high-value California crops like nuts, wine grapes and dairy foods are driven more by market demand than by the drought.”⁹

While USDA and UC Davis’ data do not indicate an immediate impact on food prices as a result of the drought, the situation is certainly worth monitoring in the coming months. Beyond the national-level impact that the increased cost of fruits and vegetables could have, locally some Central Valley leaders, particularly in the Tulare Lake Basin, are concerned about the effect increased produce prices could have on the health of their communities. For example, Genoveva Islas, Director of the Central California Regional Obesity Prevention Program, is sounding a call to vigilance on fruit and vegetable prices in the Central Valley out of concern that a rise would make cheaper and highly processed foods the more favorable option from an economic standpoint.

Genoveva Islas is not alone. Concerns about food prices were reported in CFPA’s annual policy survey, conducted in August 2014. About 70 percent ($n = 60$) of respondents believed that the drought is causing increased food insecurity in their community, with a majority of respondents indicating that higher food prices are the culprit. It is important to acknowledge this disconnect between the data and perceived impact. For example, concern about rising food costs is already causing some schools and other federal meal program providers to shift future purchase plans away from fresh produce in order to reduce anticipated budget increases. With schools and other entities often making their purchasing and budget decisions many months in advance, it is not surprising the some are hedging against higher food prices in the future.

Though researchers are not predicting drought-related food price increases at this time, it remains unclear what effect any increase in prices would have on food security. This is an area worthy of further analysis, should food price increases emerge. It is worth noting that federal nutrition programs aimed at reducing food insecurity, like CalFresh, do increase benefits to households when food prices increase (though with a slight lag).

The Drought, Emergency Food, Food Donations, and Food Security

Emergency food providers, who may rely on excess food deliveries from farms, have a harder time keeping shelves stocked when donations shrink, and cannot distribute enough food to meet the demands of newly unemployed families and previously low-income communities.

The Sacramento Bee reports that impacts of the drought are making their way into the emergency food system, as rural food banks “... are reporting higher demand for assistance from farmworkers and their families.”¹⁰

Our colleagues at the California Association of Food Banks are monitoring the impacts of the drought, both changes in demand for emergency food and on food donations, notably produce donations. Check <http://www.cafoodbanks.org/> for updates.

The Drought, Disaster Nutrition Aid, and Food Security

When communities are faced with disasters, some federal nutrition resources are available. USDA offers Disaster SNAP benefits (D-SNAP) that can provide temporary relief to households impacted by a natural disaster. These benefits can only be made available if the President declares California's drought a "major disaster" and the benefits are authorized by USDA. No such declaration has been made.

Even with the declaration of a major disaster, it appears unlikely that California would be offered D-SNAP benefits. These benefits are designed to provide short-term, time-limited relief. Prolonged negative impacts resulting from the drought make D-SNAP an unlikely fit. The limitations of these disaster benefits make it imperative that California's (non-disaster) SNAP program, CalFresh, has the capacity to help.

The Drought, School Enrollment, Nutrition, and Food Security

Migrant farmworker communities tend toward areas with available work. As the Central Valley is the state's agriculture hub, many Central Valley school districts include a high number of students from migrant farmworker communities. With the expected job loss discussed above, migrant farmworkers may not be following their typical migratory patterns.

In March 2014, Superintendent Tom Torlakson, California's head of education, explained how the drought is impacting school attendance and funding. According to Torlakson, "...one of the less obvious impacts [of the drought] is happening every day in our classrooms, where empty desks reflect children whose families could no longer find work on the farms and ranches of the Central Valley." Since school districts receive funding based on attendance, when attendance drops revenue declines, leaving districts with less funding than anticipated. With a shortage of students and without adequate funding, school-based programs, including school nutrition, could suffer, particularly in those communities highly impacted by job loss.

The Drought and Potable Water

While considerable focus has been, understandably, on the impact of the drought on water resources for agricultural production, some public drinking water systems are also vulnerable to shortages. The State Water Resources Control Board has identified a few high-risk public water systems to monitor and support.¹¹ That said, broad access to

potable water remains in place. Globally, lack of access to potable water is often an indicator for increased risk of food insecurity. Here in the United States, food insecurity exists even with access to potable water.

While potable water access hasn't been directly connected with food insecurity in California, it is absolutely necessary for good health and overall well-being. A number of communities have put restrictions on car washing, landscape irrigation, and other water uses; CFPA is not aware of any restrictions on human water consumption. Therefore we will continue to advocate for increased consumption of water in schools and in communities.

The Healthy, Hunger Free Kids Act of 2010 (S.3307) requires access to drinking water where school meals are served. For a small percentage of schools in areas with historically poor water quality and access, meeting this requirement can be a challenge. For example, Tulare County received a \$1.5 million grant from the state to provide water to schools with poor water quality. At this point in time, it is unclear how the drought will exacerbate the existing problems. As the drought continues and water tables drop, poor water quality and limited access could extend beyond their current limited geography. We will monitor this situation and propose solutions, should problems emerge.

The Drought and Federal Nutrition Programs

The federal nutrition programs are integral to California's social safety net. When operating efficiently, these programs have the potential to address the scope and scale of food insecurity and poor nutrition across our state.

CalFresh Benefits

One of the greatest strengths of CalFresh is the program's ability to respond quickly and effectively during times of economic hardship and increased need. For example, when households are faced with unanticipated life events such as underemployment, illness or a family crisis. Job loss, including that created by drought, is a good example of a "life event" for which a strong nutrition safety net should be in place. The program's ability to provide support to individuals and families during tough times is essential in ensuring consistent access to adequate nutrition.

CalFresh benefits don't just put food on the table. They reduce poverty and stimulate the local economy almost immediately. Receiving CalFresh benefits can allow households to redistribute income that would normally be allocated to purchasing food. A portion of this redistributed income can be spent on taxable goods, which generates sales tax revenue for the state and counties. This revenue-generating effect occurs

soon after CalFresh benefits are issued, as eligible households are, by necessity, more likely to spend any additional income within weeks of it being received.

While an argument could be made to focus efforts on improving the reach and responsiveness of CalFresh in the areas most directly impacted by the drought, such an approach would be shortsighted. CalFresh should always be ready to help individuals and families cope with similar “life events” each and every day, in every county across the state. It is not possible to accurately predict the full extent and impact of the drought, nor can we predict the next natural (earthquake, fire, etc.) or economic disaster (recession, mortgage crisis, etc.). For these reasons, every community should have ready access to CalFresh.

This principle is reflected in CFPA’s CalFresh goal to ensure that “enrolling and participating in CalFresh is straightforward and consistent for individuals and families across the state.”

Child Nutrition Programs

The federal child nutrition programs (e.g., School Breakfast and Lunch Programs, Child and Adult Care Food Program, Summer Food Service Program) have the potential to reach tens of millions of children in school, child care, and community settings. For many children, these programs provide the most nutritious meals they’ll eat all day. For some children, the meals are the only source of nourishment they’ll receive all day.

The drought and its deleterious effects on families across California serve as another reminder that all children need year-round access to nutritious meals. They need those meals to protect them from chronic hunger and food insecurity. They need those meals to support learning and development. They also need those meals to prevent obesity and detrimental weight gain. The solution lies not just in children having enough calories to be full, but having enough nutritious food to grow and thrive.

Children whose families are struggling to meet their most basic needs should have optimal access to free meals served by the child nutrition programs. Whether their families are struggling as a result of drought-related unemployment, chronic underemployment, or other forms of hardship, all children deserve the nutrition they need to learn, grow, and achieve at their fullest potential.

Recent Actions Supporting California’s Food Security

Over the past year, state and federal policymakers have taken legislative and regulatory actions to assist communities impacted by the drought.

Statewide Drought Relief Legislation

To lessen the impact of the drought in California, Governor Brown signed SB 103 and SB 104 into law, which provided \$687.4 million in drought assistance.^{12, 13} The majority of the funds go to the California Department of Water Resources to support drought response and preparedness projects.

The bills also include:

- ➔ \$25.3 million to the California Department of Social Services for food assistance.
- ➔ Clarifications that in the event that federal authorities declare the drought as a disaster, the Department of Finance is authorized to spend administrative dollars for disaster benefits.
- ➔ \$15 million to the California Department of Public Health to bolster emergency water supplies.
- ➔ \$10 million in funding to the California Department of Housing and Community Development for utility and housing assistance to people who become unemployed or underemployed because of the drought.
- ➔ \$2 million to the Employment Development Department.
- ➔ \$1.8 million to the Governor's Office of Emergency Services.

Statewide Budget Advocacy to Increase Emergency Food

Governor Brown's 2015 budget includes \$5 million in the General Fund for food assistance to communities impacted by the drought. That allocation comes on top of an estimated \$15 million that was unused in 2013-14 for drought relief.¹⁴

Federal Drought Relief Legislation

In February of 2014, the U.S. Senator from California, Dianne Feinstein, introduced federal legislation, S. 2016, on drought relief that would provide additional water supplies and disaster assistance for California. Additionally, USDA has offered the following support to California:^{15, 16}

- ➔ \$100 million in livestock disaster assistance
- ➔ \$15 million to the Emergency Watershed Protection Program
- ➔ \$3 million in Emergency Water Assistance Grants

Federal Action to Increase Emergency Food

USDA offers additional nutrition assistance benefits to states on an ongoing basis that supports low-income communities throughout the year, regardless of disaster. One such program is The Emergency Food Assistance Program (TEFAP). California food banks will receive \$60 million in TEFAP funds to provide nonperishable USDA foods to food banks.¹⁷ The \$60 million was earmarked for California before the drought declaration.^{18, 19}

On a trip to the Central Valley in February 2014, President Obama reiterated the role that USDA's Summer Food Service Program (SFSP) could play in supporting communities. In 2013, there were 565 sites in the Central Valley that served summer meals to students. In recent communication with CFPA, USDA expressed interest in increasing that number to support more families.

Policy Recommendations

CFPA believes the following actions are needed to increase and sustain food security during the drought and beyond.

Increase the Reach and Responsiveness of CalFresh

To improve the reach and responsiveness of CalFresh, California policymakers should focus on:

- Integrating CalFresh enrollment with health coverage (e.g. Medi-Cal) enrollment.
- Modernizing the enrollment process to support "same-day-service" for as many applicants as possible.
- Reducing the occurrence of "churn," or unnecessary reapplication, among individuals and families who never lost eligibility, but lost benefits due to administrative reasons.
- Streamlining the deduction claiming process to maximize benefit allotments.

Ensure Optimal Enrollment and Participation in Child Nutrition Programs

To ensure that the child nutrition programs reach all children in need, local, state, and federal decision makers should prioritize:

- Improving and expanding school meal enrollment processes that don't require additional paperwork for low-income households who already participate in other public benefit programs, such as CalFresh and/or Medi-Cal.
- Increasing school breakfast participation, especially in schools with high percentages of low-income students, including those kids in communities hit hard by unemployment, food insecurity, and poverty.
- Decreasing summer hunger by extending and expanding the federal Summer Electronic Benefit Transfer (EBT) for Children demonstration project to California. These benefits are known to be especially helpful in rural areas, and for California, this would include areas hit hard by the drought.

Summary

Ongoing Investments in Federal Nutrition Programs Are Necessary

To ensure that Californians have adequate access to healthy, affordable food at all times, California must invest in and protect its social safety net. Funding for and

continuous improvements to our federal nutrition assistance programs, including both CalFresh and the Child Nutrition Programs, will provide ongoing support to low-income households throughout the year. It is imperative to build a strong social safety net that supports households before they hit rock bottom. Doing so will better prepare them in the event of future disasters or droughts.

References

1. California Department of Water Resources. Governor's Drought Declaration. *Drought*. January 17, 2014. Available at: <http://www.water.ca.gov/waterconditions/declaration.cfm>. Accessed October 1, 2014.
2. University of California, Davis. Research. *California Drought Watch*. September 2014. Available at: <http://drought.ucdavis.edu/research/index.html>. Accessed October 1, 2014.
3. Anderson E, Collado-Martinez C. Nation, World + Society. *UCLA Newsroom*. April 2, 2014. Available at: <http://newsroom.ucla.edu/releases/despite-harsh-winter-and-drought-ucla-anderson-forecast-predicts-employment-growth>. Accessed October 1, 2014.
4. Li S. Drought in California may hinder job growth for years, economists say. April 2, 2014. Available at: <http://www.latimes.com/business/la-fi-ucla-forecast-20140402-story.html#ixzz2xkySdM2Z>. Accessed October 1, 2014.
5. U.S. Drought Portal. U.S. Drought Monitor California. March 25, 2014. <http://www.drought.gov/drought/area/ca>. Accessed October 1, 2014.
6. California Budget Project. Poverty Varies Significantly Across California Counties. January 8, 2014. http://cbp.org/californiabudgetbites/140108_poverty_table_and_map.pdf. Accessed October 1, 2014.
7. Chaparro M, Langellier B, Birnbach K, Sharp M, Harrison G. Nearly Four Million Californians are Food Insecure. June 2012. Available at: <http://cfpa.net/CalFresh/Media/CHIS-HealthPolicyBrief-2012.pdf>. Accessed October 1, 2014.
8. United States Department of Agriculture, Economic Research Service. California Drought 2014: Food Prices and Consumers. *USDA.gov*. September 12, 2014. Available at: <http://ers.usda.gov/topics/in-the-news/california-drought-2014-farm-and-food-impacts/california-drought-2014-food-prices-and-consumers.aspx#.VC2ZultjBKo>. Accessed October 1, 2014.
9. University of California, Davis. Drought impact study: California agriculture faces greatest water loss ever seen. *UC Davis News and Information*. July 15, 2014. Available at: http://www.news.ucdavis.edu/search/news_detail.lasso?id=10978. Accessed October 1, 2014.
10. Kaiser D. California harvest much smaller than normal across crops. *The Sacramento Bee*. September 28, 2014. Available at: <http://www.sacbee.com/2014/09/28/6739735/california-harvest-much-smaller.html>. Accessed October 1, 2014.
11. California Environmental Protection Agency State Water Resource Control Board. Drought Impact on Public Drinking Water Systems. September 2014. Available at: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DroughtImpact_PublicDr

- [inkingWaterSystems.shtml](#). Accessed October 2, 2014.
12. California State Senate Committee on Budget and Fiscal Review. S.B. 103. *Budget Act of 2013* [Enacted]. March 1, 2014. Available at: http://leginfo.ca.gov/pub/13-14/bill/sen/sb_0101-0150/sb_103_bill_20140301_chaptered.htm.
 13. California State Senate Committee on Budget and Fiscal Review. S.B. 104. *Drought relief* [Enacted]. March 1, 2014. Available at: http://leginfo.ca.gov/pub/13-14/bill/sen/sb_0101-0150/sb_104_bill_20140301_chaptered.htm.
 14. Governor Edmund G. Brown, Jr. California State Budget 2014-15. May 2014. <http://www.ebudget.ca.gov/FullBudgetSummary.pdf>.
 15. Senate of the United States, 113th Congress. S. 2016. *California Emergency Drought Relief Act of 2014*. February 11, 2014. <https://www.govtrack.us/congress/bills/113/s2016/text>.
 16. United States Department of Agriculture Office of Communication. Obama Administration Announces Additional Assistance to Californians Impacted by Drought. February 14, 2014. <http://www.usda.gov/wps/portal/usda/usdamediafb?contentid=2014/02/0022.xml&printable=true&contentidonly=true>. Accessed October 1, 2014.
 17. Karpilow K, Reed D, Chamberlain P, Shimada T. Primer Module on TEFAP. *Understanding Nutrition: A Primer on Programs and Policies in California*. Sacramento: California Center for Research on Women and Families, Public Health Institute. 2nd Edition; 2011.
 18. United States Department of Agriculture. The Emergency Food Assistance Program (TEFAP) in California. February 13, 2014. <http://www.fns.usda.gov/sites/default/files/CA-TEFAP.pdf>. Accessed October 1, 2014.
 19. Blackmore W. Psych! President's \$60M in Aid to Drought-Stricken California Farms Isn't Really an Increase. *TakePart*. February 20, 2014. <http://www.takepart.com/article/2014/02/20/food-banks-california-drought>. Accessed October 1, 2014.